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10/562,240	05/30/2006	Paul David Stotts Jr.	421/79 PCT/US	6112
25297 7590 01/27/2009 JENKINS, WILSON, TAYLOR & HUNT, P. A. Suite 1200 UNIVERSITY TOWER 3100 TOWER BLVD., DURHAM, NC 27707				
EXAMINER				
CHU, DAVID H				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,240

Applicant(s)

STOTTS JR. ET AL.

Examiner

DAVID H. CHU

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 16-50 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 and 16-50 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 22 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB008)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Specification

1. **Claim 31-38 are objected to because of the following informalities:**

The claims recite a "computer-readable storage medium," whereas the specification in page 4, lines 3-6 recites a "computer-readable medium" and "storage devices." It is not clear whether the claimed limitation refers to the "computer-readable medium" or the "storage device." If the claimed limitation refers to the "computer-readable medium," then claims 31-38 are directed to non-statutory subject matter, because the specification further recites that said "computer-readable medium" include "electrical signals." If the claimed limitation does not refer to the "computer-readable medium," the claims are still not clear that it refers to the "storage device."

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-13 and 16-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLeeuw (U.S. Patent No. 6353450) in view of Price (U.S. Patent No. 7278107).**

4. Note with respect to claim 1, DeLeeuw teaches a method for controlling a computer using at least one video image of a plurality of video images, the method comprising:

- (a) Capturing video streams, the video stream comprising a plurality of video frames and each comprising an image of a user
[501 of FIG.3 captures a video stream]
(DeLeeuw, col. 3, line 46-47)
- (b) Determining a location of an object in the video stream
[DeLeeuw, 532 of FIG.11 detects location of the blob]
- (c) Controlling a program executing on the computer based on the location of the object [DeLeeuw, 502 of FIG.10]

- (d) Combining the video stream with a user interface stream generated by the computer operating system, thereby forming a composite video stream [DeLeeuw, 24 of FIG.2]
- (e) Displaying the composite video stream [DeLeeuw, 116 of FIG.3]

However, DeLeeuw does not expressly teach:

- A plurality (at least 2) of video streams, as recited by the Applicant

Price teaches:

- A collaborative meeting wherein one or more users can manipulate a window of the shared application (Price, Abstract)

Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to apply the user interface teaching of DeLeeuw in a network-based collaborative meeting as taught by Price, wherein multiple instances of the user interface of DeLeeuw is applied to each user participating in the collaborative meeting, ***because this allows all meeting partners to view the same work product at the same time.***

5. Note with respect to claim 2, the combined teachings of DeLeeuw and Price teach the method of claim 1 wherein capturing n video streams includes
- Receiving a live video signal of a user generated by a video camera (DeLeeuw, col. 3, line 46-47)

6. Note with respect to claim 3, the combined teachings of DeLeeuw and Price teach the method of claim 1 wherein capturing n video streams includes
- Receiving a stored video signal from a video storage device
(DeLeeuw, col. 2, line 57 & col. 7, line 23-27)
7. Note with respect to claim 4, the combined teachings of DeLeeuw and Price teach the method of claim 1 wherein determining the location an object in at least one of the n video streams includes:
- Searching for a predetermined color in one of the n video streams
(DeLeeuw, col. 14, line 6-21)
 - In response to locating the predetermined color, identifying an occurrence of the predetermined color having the largest area
(DeLeeuw, col. 14, line 6-21)
 - Determining coordinates of the center of the occurrence of the predetermined color having the largest area
(DeLeeuw, col. 16, line 23-26)
8. Note with respect to claim 5, the combined teachings of DeLeeuw and Price teach the method of claim 1 wherein controlling a program executing on the computer based on the location of the object comprises:
- (a) Analyzing motion of the object in successive video frames to determine presence of a control event
(DeLeeuw, col. 3, line 65 – col. 4, line 3)

- (b) Controlling the program based on the control event

{DeLeeuw, col. 16, line 26-31}

9. Note with respect to claim 6, the combined teachings of DeLeeuw and Price teach the method of claim 5 wherein,

- Each of the n video streams comprises an image of a different computer user

[Each user of the meeting will have the respective different video streams]

- The object comprises an object associated with the user's hand, and the control event comprises a pointer movement event

{DeLeeuw, col. 4, line 26-33 & col. 3, line 19-42}

10. Note with respect to claim 7, the combined teachings of DeLeeuw and Price teach the method of claim 5 wherein,

- Each of the n video streams comprises an image of a different computer user

[Each user of the meeting will have the respective different video streams]

- The object comprises an object located in the user's hand, and the control event comprises a mouse click event

{DeLeeuw, col. 4, line 26-33 & col. 3, line 19-42}

11. Note with respect to claim 8, DeLeeuw teaches the method of claim 1 wherein, combining the n video streams with the user interface stream generated by the computer operating system includes,

- Horizontally reversing frames of the n video streams to produce a mirror image of the frames of the n video streams

{DeLeeuw, col. 13, line 51-55}

12. Note with respect to claim 9, the combined teachings of DeLeeuw and Price teach the method of claim 1 wherein, Combining the n video streams with the user interface stream generated by the computer operating system includes,

- Transparently overlaying the user interface stream on the n video streams

{DeLeeuw, col. 3, line 43-61}

13. Note with respect to claim 10, the combined teachings of DeLeeuw and Price teach the method of claim 1 wherein combining the n video streams with the user interface stream generated by the computer operating system includes,

- Transparently overlaying the n video streams on the user interface stream

{DeLeeuw, col. 6, line 25-32}

14. Note with respect to claim 11, the combined teachings of DeLeeuw and Price teach the method of claim 1 wherein combining the n video streams with the user interface stream generated by the computer operating system includes:

- (a) Adjusting a transparency level of at least one of the user interface stream and the n video streams

{DeLeeuw, col. 14, line 46-58}

- (b) Generating the composite stream from the user interface stream and the n video streams

{DeLeeuw, 24, FIG.2}

15. Note with respect to claim 12, the combined teachings of DeLeeuw and Price teach the method of claim 11 wherein adjusting the transparency level includes,

- Dynamically adjusting the transparency level

{DeLeeuw, col. 4, line 62-64}

16. Note with respect to claim 13, the combined teachings of DeLeeuw and Price do not expressly teach the method of claim 1 wherein displaying the composite video stream includes,

- Projecting the composite video stream

However, it is well known in the art to use a projector as a display device.

Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to use a projector display as the video display of the combined teachings of DeLeeuw and Price, ***because such combination yields predictable results.***

17. Note with respect to claim 16, claim 16 is similar in scope to the claims 1, 9 and 10, thus the rejections to claims 1, 9 and 10 hereinabove are also applicable to claim 16.

18. Note with respect to claims 17-21, claims 17-21 are similar in scope to claims 2, 8, 11, 12 and 13 respectively, thus the rejections to claims 2, 8, 11, 12 and 13 are also applicable to claims 17-21.

19. Note with respect to claim 22, the combined teachings of DeLeeuw and Price teach the method of claim 16 wherein displaying the composite video stream includes,

- Displaying the composite video stream on a non-projection computer display device (DeLeeuw, video display 116 of FIG. 3)

20. Note with respect to claim 23, claim 23 is similar in scope to the claims 8 and 18, thus the rejections to claims 8 and 18 hereinabove are also applicable to claim 23.

21. Note with respect to claims 24-26, claims 24-26 are similar in scope to the claim 6 and 7, thus the rejections to claim 6 and 7 hereinabove are also applicable to claims 24-26.

22. Note with respect to claim 27, the combined teachings of DeLeeuw and Price teach the method of claim 16 wherein the desktop comprises:

- A desktop of a computer local to at least one of the users
(Price, the collaborative networked meeting comprise of a computer local to a user and computer(s) remote to said user)

23. Note with respect to claim 28, the combined teachings of DeLeeuw and Price teach the method of claim 16 wherein the desktop comprises:
- A desktop of a computer remote from at least one of the users
(Price, the collaborative networked meeting comprise of a computer local to a user and computer(s) remote to said user)
24. Note with respect to claim 29, claim 29 is similar in scope to the claim 6, thus the rejections to claim 6 hereinabove are also applicable to claim 29.
25. Note with respect to claim 30, claim 30 is similar in scope to the claims 6 and 7, thus the rejections to claim 6 and 7 hereinabove are also applicable to claim 30.
26. Note with respect to claims 31-34, claims 31-34 are similar in scope to the claims 1, 4, 11 and 34, thus the rejections to claims 1, 4, 11 and 34 hereinabove are also applicable to claims 31-34. Note further, DeLeeuw teaches the computer system in FIG.2-5.
27. Note with respect to claim 35, claim 35 is similar in scope to the claims 1 and 5, thus the rejections to claims 1 and 5 hereinabove are also applicable to claim 35.
28. Note with respect to claim 36, the combined teachings of DeLeeuw of Price teach:
- Selecting an object for manipulation (DeLeeuw, col. 4, line 26-33 & col. 3, line 19-42)

However, the combined teachings of DeLeeuw and Price do not expressly teach the computer program product of claim 35 wherein manipulating objects includes,

- Highlighting the objects

However, it is well known in the art to highlight objects that are selected with a computer pointer mouse.

Therefore, at the time of the invention, it would have been obvious to one of an ordinary skill in the art to highlight the object selected by the user in the combined system of DeLeeuw and Price, ***because this enables visual feedback of the selected item.***

29. Note with respect to claims 37-41, claims 37-41 are similar in scope to the claims 6, 7, 1, 6 and 1 respectively, thus the rejections to claims 6, 7 and 1 hereinabove are also applicable to claims 37-41.

30. Note with respect to claim 42, claim 42 is similar in scope to the claim 1, thus the rejections to claim 1 hereinabove are also applicable to claim 42.

31. Note with respect to claim 43, the combined teachings of DeLeeuw and Price teach the method of claim 42 wherein,

- The collaborative desktop application allows each user to control his or her own mouse pointer on a shared desktop

[Each users of the network based collaborative meeting of Price have their own mouse pointer for control on each respective desktop]

32. Note with respect to claims 44-46, claims 44-46 are similar in scope to the claims 41, 42 and 6 respectively, thus the rejections to claims 41, 42 and 6 hereinabove are also applicable to claims 44-46.

33. Note with respect to claims 47, 48 and 50, claims 47, 48 and 50 are similar in scope to the claim 44, thus the rejections to claim 44 hereinabove are also applicable to claims 47, 48 and 50.

34. Note with respect to claim 49, claim 49 is similar in scope to the claim 6, thus the rejections to claim 6 hereinabove are also applicable to claim 49.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID H. CHU whose telephone number is (571)272-8079. The examiner can normally be reached on M-F 9:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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